## **SIEMENS**

Data sheet 3RP15 31-1AQ30



Timing relay, electronic Phase-out product! For further information, contact our sales department with OFF delay 1 CO contact, with aux. voltage 1 time range 0.5 s...10 s 24, 100...127 V AC and 24 V DC at 50/60 Hz AC with LED, screw terminal

## Figure similar

General technical data:		
product brandname		SIRIUS
Product designation		timing relay
Mounting position		any
Product function non-volatile		No
Product component		
Relay output		Yes
• semi-conductor output		No
Installation altitude at height above sea level	m	2 000
maximum		
Ambient temperature		
<ul><li>during operation</li></ul>	°C	-25 +60
<ul><li>during storage</li></ul>	°C	-40 +85
during transport	°C	-40 <b>+</b> 85
Relative humidity during operation	%	10 95
EMC emitted interference acc. to IEC 61812-1		EN 61000-6-4(3)
EMI immunity acc. to IEC 61812-1		EN 61000-6-2

Conducted interference due to burst acc. to IEC 61000-4-4		2 kV network connection / 1 kV control connection
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5		2 kV
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV
Electrostatic discharge acc. to IEC 61000-4-2		4 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling acc. to IEC 61000-4-3		10 V/m
Surge voltage resistance rated value	V	4 000
Power loss [W] total typical	W	2
Equipment marking		
<ul> <li>acc. to DIN 40719 extended according to IEC 204-2 acc. to IEC 750</li> </ul>		К
• acc. to DIN EN 61346-2		K
• acc. to DIN EN 81346-2		К
Category acc. to EN 954-1		none
Protection against electrical shock		finger-safe
Protection class IP		IP20
Type of insulation		Basic insulation
Mechanical service life (switching cycles) typical		10 000 000
Electrical endurance (switching cycles) at AC-15 at 230 V typical		100 000
Operating frequency with 3RT2 contactor maximum	1/h	5 000
Vibration resistance acc. to IEC 60068-2-6		10 55 Hz / 0.35 mm
Shock resistance acc. to IEC 60068-2-27		11g / 15 ms
Relative repeat accuracy	%	1
Recovery time	ms	150
Minimum ON period	ms	35
Degree of pollution		3
Insulation voltage for overvoltage category III according to IEC 60664 with degree of pollution 3 rated value	V	300
Relative setting accuracy relating to full-scale value	%	5
Product extension required remote control		No
Product extension optional remote control		No
Switching Function:		
Switching function		
ON-delay		No
ON-delay/instantaneous contact		No
passing make contact		No
passing make contact/instantaneous contact		No
OFF delay		No
•		

• flashing asymmetrically starting with interval

No

<ul> <li>flashing asymmetrically starting with pulse</li> </ul>	No
<ul> <li>flashing symmetrically starting with pulse</li> </ul>	No
<ul> <li>flashing symmetrically starting with pulse/instantaneous</li> </ul>	No
• flashing symmetrically starting with interval	No
<ul> <li>flashing symmetrically starting with interval/instantaneous</li> </ul>	No
• star-delta circuit	No
<ul> <li>star-delta circuit with delay time</li> </ul>	No
Switching function with control signal	
<ul> <li>additive ON delay</li> </ul>	No
passing break contact	No
OFF delay	Yes
• pulse-shaping	No
OFF delay/instantaneous	No
<ul> <li>ON-delay/OFF-delay/instantaneous</li> </ul>	No
<ul> <li>passing break contact/instantaneous</li> </ul>	No
<ul> <li>additive ON delay/instantaneous</li> </ul>	No
ON-delay/OFF-delay	No
passing make contact	No
• passing make contact/instantaneous contact	No
• pulse delayed	No
• pulse delayed/instantaneous	No
• pulse-shaping/instantaneous	No
Switching function of interval relay with control signal	
<ul> <li>retrotriggerable with deactivated control signal/instantaneous contact</li> </ul>	No
<ul> <li>retrotriggerable with activated control signal</li> </ul>	No
<ul> <li>retrotriggerable with activated control signal/instantaneous contact</li> </ul>	No
<ul> <li>retriggerable with deactivated control signal</li> </ul>	No
Design of the control terminal non-floating	Yes

Control circuit/ Control:		
Adjustable time	S	0.5 10
Type of voltage of the control supply voltage		AC/DC
Control supply voltage frequency 1	Hz	50 60
Control supply voltage frequency 2	Hz	50 60
Control supply voltage 1		
● at AC at 50 Hz rated value	V	24
• at AC at 60 Hz rated value	V	24
• at DC rated value	V	24
Control supply voltage 2 at AC		

● at 50 Hz	V	100 127
● at 60 Hz	V	100 127
Operating range factor control supply voltage rated value		
• at AC		
— at 50 Hz		0.85 1.1
— at 60 Hz		0.85 1.1
• at DC		0.85 1.1

Auxiliary circuit:		
Contact reliability of auxiliary contacts		one incorrect switching operation of 100 million
		switching operations (17 V, 5 mA)
Material of switching contacts		AgSnO2
Operating current of auxiliary contacts		
● at AC-15		
— at 24 V	Α	3
— at 250 V	Α	3
● at DC-13		
— at 24 V	Α	1
— at 125 V	Α	0.2
— at 250 V	Α	0.1
Influence of the surrounding temperature		±5 %
Power supply influence		±1 %
Test voltage for isolation test	kV	2
Design of the fuse link for short-circuit protection of		fuse gL/gG: 4 A
the auxiliary switch required		
Thermal current	Α	5
Number of NC contacts		
<ul><li>delayed switching</li></ul>		0
• instantaneous contact		0
Number of NO contacts		
<ul><li>delayed switching</li></ul>		0
• instantaneous contact		0
Number of CO contacts		
<ul><li>delayed switching</li></ul>		1
• instantaneous contact		0
Contact rating of auxiliary contacts according to UL		R300 / B300

Installation/ mounting/ dimensions:			
Mounting type		screw and snap-on mounting onto 35 mm standard	
		mounting rail	
Width	mm	22.5	
Height	mm	102	
Depth	mm	91	

Required spacing with side-by-side mounting		
• upwards	mm	0
• forwards	mm	0
• at the side	mm	0
Backwards	mm	0
• downwards	mm	0
Required spacing for grounded parts	_	
<ul><li>Backwards</li></ul>	mm	0
• at the side	mm	0
• upwards	mm	0
• forwards	mm	0
• downwards	mm	0
Required spacing for live parts		
<ul><li>downwards</li></ul>	mm	0
Backwards	mm	0
• at the side	mm	0
• forwards	mm	0
• upwards	mm	0

Connections/ Terminals:		
Type of electrical connection for auxiliary and control current circuit		screw-type terminals
Product function removable terminal for auxiliary and control circuit		Yes
Type of connectable conductor cross-sections		
• solid		1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
• finely stranded		
<ul><li>— with core end processing</li></ul>		1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
<ul> <li>at AWG conductors</li> </ul>		
— stranded		2x (20 14)
— solid		2x (20 14)
Tightening torque	N·m	0.8 1.2
Design of the thread of the connection screw		M3

## Certificates/approvals

## **General Product Approval**

Declaration of Conformity

Test Certificates











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Test Certificates **Shipping Approval** 

Typprüfbescheinigu ng/Werkszeugnis





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Shipping Approval other

Bestätigungen

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Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RP1531-1AQ30

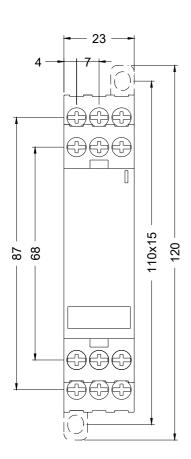
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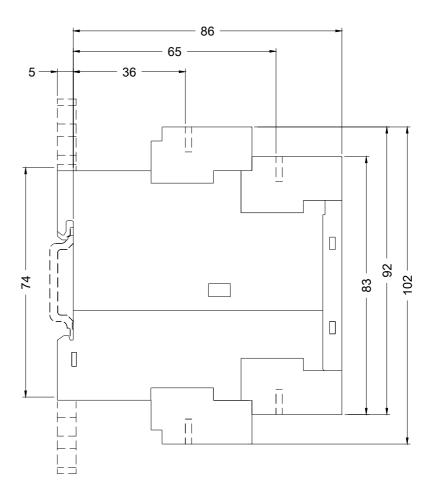
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Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

https://support.industry.siemens.com/cs/ww/en/ps/3RP1531-1AQ30

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RP1531-1AQ30&lang=en





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